JAVELIN

Park Industries (User) Alarms

(700000 ~ 700999)

April 7, 2023 (Version 01.00.01

700040 WARNING – LUBRICATION LEVEL IS LOW

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX559.0

Explanation: The auto-lube system is low on grease.
Cause: Three or more low level signals (PLC input (I50.6)) were detected during the auto-lube cycle.
Reaction: The alarm is latched until cleared.
Activation of this alarm does not affect machine operation.
Remedy: Service the auto-lube system.

700041 WARNING – LUBRICATION FLOW IS LOW

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX559.1

Explanation: The auto-lube system is not detecting grease flow.
Cause: Three or fewer full flow signals (PLC input (I50.4)) were detected during the auto-lube cycle.
The lube cycle runs for up to 90 seconds. During this time, once 4 flow signals are detected, the lube cycle is complete and the 90 second timer is stopped prematurely. If 90 seconds elapses without 4 flow signals detected, this alarm is raised.
Reaction: The alarm is latched until cleared.
Activation of this alarm does not affect machine operation.
Remedy: Service the auto-lube system. Manually run the lube pump and make sure PLC input I51.4 occasionally comes on.

700044 ATTENTION – ARBOR WATER FLOW SWITCH ERROR WHILE VALVE DE-ENERGIZED

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX559.4

Explanation: Monitor signal integrity of the machine's PLC output and input combinations and avoid/detect use of jumper wires.
See related alarm 700152.

Cause: The PLC output for the arbor water valve (Q70.0) is off but the water flow switch signal PLC input (I50.2) is on. The input signal must respond within 10 seconds of the PLC output.
Note: this alarm does not occur if the “water alarm suppress” option is selected on the front-end.

Reaction: This alarm is self-clearing.
Activation of this alarm does not affect machine operation.

Remedy: Check integrity of the spindle water flow switch signal coming back to the PLC. When PLC output (Q70.0) is off, PLC input (I50.2) should be off.

700045 ATTENTION - LARGE GARNET HOPPER IS LOW

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX559.5

Explanation: Monitor the level of garnet in the large garnet hopper

Cause: The PLC monitors the amount of garnet in the large garnet hopper. The message is displayed when the sensor input (I60.7) is off for a set amount of time determined by the operator. This time duration can be modified through the HMI.

Reaction: This alarm is self-clearing.
Activation of this alarm does not affect machine operation.

Remedy: Add more garnet to the large garnet hopper. Check that the sensor is setup properly. Input (I60.7) should be on when sensor detects garnet. Check that the time delay value is set correctly.

700046 ATTENTION - X AXIS IS DISABLED

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX559.6

Explanation: The X axis is disabled if position is greater than 25.000” and the bridge is not perpendicular to the X axis rail. The X axis is also disabled if the tool measurer is raised.

Cause: The bridge must stay within the machine’s envelope. The X axis is disabled if the Column axis is not perpendicular to the X rail and its position is greater than 25.000”. The Column axis must be less than +80° or greater than -80° to be able to move the X axis. The X axis can not be moved when the tool measurer is raised.

Reaction: This alarm is self-clearing.
While this alarm is active, The X axis is disabled.
Remedy: Move the Column axis to either Table1 or Table 2 prior to moving X. Lower the tool measurer.

700047 ATTENTION - COLUMN AXIS IS DISABLED

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX559.7

Explanation: The Column axis is disabled if the X axis position is greater than 20.000”
Cause: The bridge must stay within the machine’s envelope. The Column axis can only be moved if the X axis is less than 20.000”.
Reaction: This alarm is self-clearing.
While this alarm is active, The Column axis is disabled.
Remedy: Move the X axis to less than 20.000” prior to moving the Column axis

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700048 ATTENTION - X AXIS MUST BE < 50.000" TO RAISE TOOL MEASURER

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX560.0

Explanation: The tool measurer can only be raised when the X axis is less than 50.000”
Cause: The X axis position is greater than 50.000” and the tool measurer was requested to raise.
Reaction: This alarm is self-clearing after 5 seconds.
The tool measurer will remain lowered.
Remedy: Move the Column axis to either Table1 or Table 2 prior to moving X

700049 NC CYCLE STARTS DISABLED – INCOMING AIR PRESSURE TOO LOW

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX560.1

Explanation: Monitoring of the system incoming air pressure.
Cause: While the system is on, the incoming air pressure switch PLC input (I50.1) is monitored. If the PLC input is off for 2 consecutive seconds, the alarm is active.
Reaction: This alarm is self-clearing.
While this alarm is active, NC Cycle Starts are disabled.

Remedy: Service and check the incoming air pressure switch and pressure level during machine operation. Make sure the plant's air supply can adequately maintain pressure *during* air consumption. PLC input (I50.1) should be on when air pressure is present.

700053 NC CYCLE STARTS DISABLED – TEST STOP REQUIRED (CYCLE SYSTEM ON)

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX560.5

Explanation: As part of the machine's safety requirements, each axis motor must periodically perform (and pass) a “test stop”. On the Javelin the period is 24 hours. A “test stop” check/execution is a regular function of the system on sequence.
Cause: Any axis (X, Y, Z, A, C, or Column) motor has not run a “test stop” for 24 hours.
Reaction: This alarm is self-clearing.
While this alarm is active, NC Cycle Starts are disabled.
Machine operation is not interrupted if this alarm occurs during program execution.
Remedy: Re-run a system-on sequence.
Note: you can turn the system off by pressing and holding the system on button.

700054 NC CYCLE STARTS DISABLED – X AXIS IS NOT REFERENCED

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX560.6

Explanation: The machine cannot operate with an axis that is not referenced.
Cause: This alarm occurs when the system is on, the axis status bit “ok” (Sinumerik ONE axis bit DB31.DBX93.5) is on and the axis status bit “referenced” (Sinumerik ONE axis bit DB31.DBX60.4) is off (position measuring system 1 of the machine axis is not referenced/synchronized).
Reaction: This alarm is self-clearing.
When this alarm is first triggered, an NCK Reset is also triggered.
While this alarm is active, NC Cycle Starts are disabled.
Remedy: Reference the axis.

700055 NC CYCLE STARTS DISABLED – Y AXIS IS NOT REFERENCED

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX560.7

Explanation: The machine cannot operate with an axis that is not referenced.

Cause: This alarm occurs when the system is on, the axis status bit “ok” (Sinumerik ONE axis bit DB32.DBX93.5) is on and the axis status bit “referenced” (Sinumerik ONE axis bit DB32.DBX60.4) is off (position measuring system 1 of the machine axis is not referenced/synchronized).
Reaction: This alarm is self-clearing.
When this alarm is first triggered, an NCK Reset is also triggered.
While this alarm is active, NC Cycle Starts are disabled.
Remedy: Reference the axis.

700056 NC CYCLE STARTS DISABLED – NCU HEAT SINK TEMPERATURE TOO HIGH

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX561.0

Explanation: Status of the Sinumerik ONE is monitored.
Cause: The heat sink temperature limit of the NCU has been exceeded (Sinumerik ONE system bit DB10.DBX109.5 is on). Continuous NCU operation can no longer be guaranteed.
Reaction: This alarm is self-clearing.
While this alarm is active, NC Cycle Starts are disabled.
Remedy: Investigate cooling/heating aspect of the main enclosure.

700057 NC CYCLE STARTS DISABLED – NC AMBIENT AIR TEMPERATURE TOO HIGH

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX561.1

Explanation: Status of the Sinumerik ONE is monitored.
Cause: The ambient air temperature limit of the NCU has been exceeded (Sinumerik ONE system bit DB10.DBX109.6 is on). It is also possible the cooling fan of the module has responded.
Reaction: This alarm is self-clearing.
While this alarm is active, NC Cycle Starts are disabled.
Remedy: Replace the fan and/or ensure that adequate cooling is provided.

700058 MAINTENANCE WARNING – NC BATTERY VOLTAGE TOO LOW

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX561.2

Explanation: Status of the Sinumerik ONE is monitored.

Cause: The NC battery voltage monitoring function has responded (Sinumerik ONE system bit DB10.DBX109.7 is on). This may be due to the following:

- The battery voltage is within the pre-warning limit range (approx. 2.7 to 2.9 V).
- The battery voltage is below the pre-warning limit range (≤ 2.6 V).
- When the controller powered up, it was identified that the battery voltage was below the pre-warning limit range (≤ 2.6 V).

Reaction: This alarm is self-clearing.
Activation of this alarm does not affect machine operation.

Remedy: Replace the battery.
Note: the NC battery should only be replaced while the NC is switched on to avoid data loss as there is no memory backup.

700060 NC CYCLE STARTS DISABLED – Z AXIS IS NOT REFERENCED

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX561.4

Explanation: The machine cannot operate with an axis that is not referenced.

Cause: This alarm occurs when the system is on, the axis status bit “ok” (Sinumerik ONE axis bit DB33.DBX93.5) is on and the axis status bit “referenced” (Sinumerik ONE axis bit DB33.DBX60.4) is off (position measuring system 1 of the machine axis is not referenced/synchronized).

Reaction: This alarm is self-clearing.
When this alarm is first triggered, an NCK Reset is also triggered.
While this alarm is active, NC Cycle Starts are disabled.

Remedy: Reference the axis.

700061 NC CYCLE STARTS DISABLED – A AXIS IS NOT REFERENCED

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX561.5

Explanation: The machine cannot operate with an axis that is not referenced.

Cause: This alarm occurs when the system is on, the axis status bit “ok” (Sinumerik ONE axis bit DB34.DBX93.5) is on and the axis status bit “referenced” (Sinumerik ONE axis bit DB34.DBX60.4) is off (position measuring system 1 of the machine axis is not referenced/synchronized).

Reaction: This alarm is self-clearing.
When this alarm is first triggered, an NCK Reset is also triggered.
While this alarm is active, NC Cycle Starts are disabled.

Remedy: Reference the axis.

700062 NC CYCLE STARTS DISABLED – C AXIS IS NOT REFERENCED

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX561.6

Explanation: The machine cannot operate with an axis that is not referenced.
Cause: This alarm occurs when the system is on, the axis status bit “ok” (Sinumerik ONE axis bit DB35.DBX93.5) is on and the axis status bit “referenced” (Sinumerik ONE axis bit DB35.DBX60.4) is off (position measuring system 1 of the machine axis is not referenced/synchronized).
Reaction: This alarm is self-clearing.
When this alarm is first triggered, an NCK Reset is also triggered.
While this alarm is active, NC Cycle Starts are disabled.
Remedy: Reference the axis.

700063 NC CYCLE STARTS DISABLED – COLUMN AXIS IS NOT REFERENCED

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX561.7

Explanation: The machine cannot operate with an axis that is not referenced.
Cause: This alarm occurs when the system is on, the axis status bit “ok” (Sinumerik ONE axis bit DB36.DBX93.5) is on and the axis status bit “referenced” (Sinumerik ONE axis bit DB36.DBX60.5) is off (position measuring system 2 of the machine axis is not referenced/synchronized).
Reaction: This alarm is self-clearing.
When this alarm is first triggered, an NCK Reset is also triggered.
While this alarm is active, NC Cycle Starts are disabled.
Remedy: Reference the axis.

700132 INTERNAL E-STOP ACTIVE – OB82 I/O POINT FAULT (CONTACT PARK)

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX566.0

Explanation: PLC internal monitor.
Cause: OB82 has been activated by a diagnostics event of a PLC module. See SIEMENS documentation for in-depth explanations of events that could cause OB82 to activate.
Reaction: The machine is E-stopped (because the integrity of the control architecture is unknown).
Remedy: Check PLC hardware for integrity, errors, and faults.

700133 INTERNAL E-STOP ACTIVE – OB86 RACK FAULT (CONTACT PARK)

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX566.1

Explanation: PLC internal monitor.
Cause: OB86 has been activated by a hardware diagnostics event of the PLC. See SIEMENS documentation for in-depth explanations of events that could cause OB86 to activate.
Reaction: The machine is E-stopped (because the integrity of the control architecture is unknown).
Remedy: Check PLC hardware for integrity, errors, and faults.

700135 INTERNAL E-STOP ACTIVE – OB121 PROGRAMMING ERROR (CONTACT PARK)

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX566.3

Explanation: PLC internal monitor.
Cause: The operating system of the CPU calls OB121 whenever an event occurs that is caused by an error related to the processing of the program. For example, if the PLC program calls a block that has not been loaded on the CPU.
Reaction: The machine is E-stopped (because the integrity of the control architecture is unknown).
Remedy: Notify Park Industries engineering to address the programming error.

700136 INTERNAL E-STOP ACTIVE – OB122 MODULE ACCESS ERROR (CONTACT PARK)

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX566.4

Explanation: PLC internal monitor.
Cause: The operating system of the CPU calls OB122 whenever an error occurs while accessing data on a module. For example, if the CPU detects a read error when accessing data on an I/O module.
Reaction: The machine is E-stopped (because the integrity of the control architecture is unknown).
Remedy: Check PLC hardware for integrity, errors, and faults.

700137 INTERNAL E-STOP ACTIVE – SYSTEM OFF REQUEST

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX566.5

Explanation: System Off Request when the system is ON.
Reaction: The machine is E-stopped to turn off system and disable drives.
Remedy: Press Alarm Reset or System On to clear alarm.

700140 MACHINE E-STOP SIGNAL ACTIVE – HMI CONSOLE E-STOP PUSHBUTTON

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX567.0

Explanation: Displays the status of the E-stop device.

Cause: This alarm is raised when the PLC logical input (I20.0) of the HMI console E-Stop indicates the device is in the E-stopped condition.

Reaction: This alarm is self-clearing.
The alarm is for displaying the status of the E-stop device only.

Remedy: Reset the E-stop device. Check the pair of PLC inputs (I20.0 and I20.4) against the schematic for proper 2-channel signaling (both channels should be electrically equivalent).

700141 MACHINE E-STOP SIGNAL ACTIVE – PENDANT E-STOP PUSHBUTTON

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX567.1

Explanation: Displays the status of the E-stop device.

Cause: This alarm is raised when the PLC logical input (I20.1) of the HHU (pendant) E-Stop indicates the device is in the E-stopped condition.

Reaction: This alarm is self-clearing.
The alarm is for displaying the status of the E-stop device only.

Remedy: Reset the E-stop device. Check the pair of PLC inputs (I20.1 and I20.5) against the schematic for proper 2-channel signaling (both channels should be electrically equivalent).

700142 MACHINE E-STOP SIGNAL ACTIVE – PULL CORD

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX567.2

Explanation: Displays the status of the E-stop device.

Cause: This alarm is raised when the PLC logical input (I30.0) of the pull cord indicates the device is in the E-stopped condition.

Reaction: This alarm is self-clearing.
The alarm is for displaying the status of the E-stop device only.

Remedy: Reset the pull cord by pushing the blue button. Check the pair of PLC inputs (I30.0 and I30.4) against the schematic for proper 2-channel signaling (both channels should be electrically equivalent).

700144 WARNING – SYSTEM IS NOT ON

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX567.4

Explanation: If no hardware E-stop devices are tripped, this alarm displays the status of the system on circuit.

Cause: If the system on circuit is not on, the PLC logical safety relay is disabled (which is equivalent to pressing a hardware E-stop device).

Reaction: This alarm is self-clearing.
The alarm is for displaying the status of the E-stop cause only.

Remedy: This alarm will clear when the system circuit comes on or an actual hardware E-stop device is tripped.

700149 ATTENTION – MACHINE SAFETY SPEED LIMIT BEING ENFORCED

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX568.1

Explanation: Displays when the machine motion velocity is limited.

Cause: This alarm is raised when the system is on, and the arbor disable switch is set to “disable” or the mini handheld unit (pendant) is enabled.

Reaction: This alarm is self-clearing.
When this alarm is activated, an NC Cycle Stop is triggered (NC Cycle Starts are disabled because the arbor is disabled). Axes X, Y, Z, A, C and COLUMN are held in Safe Limited Speed (SLS) mode.

Remedy: Enable the arbor. Check the pair of PLC inputs (I20.2 and I20.6) against the schematic for proper 2-channel signaling (both channels should be electrically equivalent).

700152 NC CYCLE STOPPED – ARBOR WATER FEED LOW/NO FLOW

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX568.4

Explanation: Monitor signal integrity of the machine's PLC output and input combinations and avoid/detect use of jumper wires.
See related alarm 700044.

Cause: The PLC output for the arbor water valve (Q70.0) is on but the water flow switch signal PLC input (I50.2) is off. The input signal must respond within 5 seconds of the PLC output.
Note: this alarm does not occur if the “water alarm suppress” option is selected on the front-end.

Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.

Remedy: Check integrity of the spindle water flow switch signal coming back to the PLC. When PLC output (Q70.0) is on, PLC input (I50.2) should be on.

700153 NC CYCLE STOPPED – ARBOR VFD FAULT

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX568.5

Explanation: The arbor variable frequency drive (VFD) has signaled the PLC of a fault.
Cause: The PLC received a signal from the VFD on input I50.3.
Reaction: The alarm is latched until cleared in VFD.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Look at the display on the VFD located in the main enclosure. Refer to the VFD manual for more information on the fault.

700154 NC CYCLE STOPPED – ARBOR OVERAMP FAULT

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX568.6

Explanation: The arbor current has exceeded the set overamp value.
Cause: The arbor current is monitored while running and the actual current was greater than the arbor full load for more than 3 seconds.
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Check the arbor full load setting in the HMI and compare it to the arbor motor name plate. Verify the analog input signal from the VFD.

700155 NC CYCLE STOPPED – JET NOZZLE BROKE

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX568.7

Explanation: The PLC has detected that the waterjet nozzle is broken.
Cause: The sensor monitoring the waterjet nozzle has turned off.
Reaction: The alarm is latched until cleared. Upon alarm activation, an NC Stop signal is triggered.
Remedy: Check the PLC input I51.0. Check the sensor's lights and target proximity. The PLC input (I51.0) and sensor light should be on when the sensor is close to a metal target.

700156 ATTENTION - SLAB LOADER HYDAULIC PUMP OVERLOAD

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX569.0

Explanation: The PLC has detected that the hydraulic pump for the slab loader tables overloaded.
Cause: The overload monitoring device in the main panel has tripped.

Reaction: The alarm is latched until the issue is resolved. This alarm does not affect the operation of the machine.

Remedy: Reset the overload on the hydraulic pump motor starter. Check the PLC input I61.0.

700157 NC CYCLE START DISABLED – TABLE 1 IS NOT DOWN

Control Package Version: 01.00.01

PLC Activation Address: DB2.DBX569.1

Explanation: The PLC has detected that one or both of the table down proximity sensors are not activated.

Cause: The table is not all the way down. One of the proximity sensors may have failed or is too far from the target.

Reaction: The alarm is latched until reset. This alarm does not affect the operation of the machine but will not allow a cycle start.

Remedy: Check that PLC inputs I60.2 and 60.4 are on. Verify proximity sensors are adjusted properly. Replace faulty proximity sensors and/or cable.

700158 NC CYCLE START DISABLED – TABLE 2 IS NOT DOWN

Control Package Version: 01.00.01

PLC Activation Address: DB2.DBX569.2

Explanation: The PLC has detected that one or both of the table down proximity sensors are not activated.

Cause: The table is not all the way down. One of the proximity sensors may have failed or is too far from the target.

Reaction: The alarm is latched until reset. This alarm does not affect the operation of the machine but will not allow a cycle start.

Remedy: Check that PLC inputs I60.3 and 60.5 are on. Verify proximity sensors are adjusted properly. Replace faulty proximity sensors and/or cable.

700232 SAFE NOZZLE VIOLATION - NOZZLE IS NOT DOWN

Control Package Version: 01.00.01

PLC Activation Address: DB2.DBX574.0

Explanation: The PLC has detected that the waterjet assembly is not down. The Jet nozzle will not open unless the waterjet assembly is down.

Cause: The sensor monitoring that the waterjet assembly is down has turned on.

Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.

Remedy: Check the following.

- The PLC input I50.7 is on.
- The waterjet nozzle assembly down sensor is on (located on the air cylinder).
- Verify there are no mechanical restrictions preventing it from lowering.
- Check that there is sufficient air pressure.

700233 SAFE NOZZLE VIOLATION - NOZZLE IS UP

Control Package Version: 01.00.01

PLC Activation Address: DB2.DBX574.1

Explanation: The PLC has detected that the waterjet assembly up sensor is on. The Jet nozzle will not open unless the waterjet assembly is down.

Cause: The sensor monitoring that the waterjet assembly is not up is still on.

Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.

Remedy: Check the following.

- The PLC input I51.1 is off.
- The waterjet nozzle assembly up sensor is on (located on the air cylinder).
- Verify there are no mechanical restrictions preventing it from lowering.
- Check that there is sufficient air pressure.

700233 SAFE NOZZLE VIOLATION – NON VALID JET LOCATION

Control Package Version: 01.00.01

PLC Activation Address: DB2.DBX574.2

Explanation: The PLC used the encoder position in the drive to determine if the waterjet is in a valid orientation to be run. The Jet nozzle will not open unless the waterjet assembly is in a valid location.

Cause: The waterjet nozzle is too close to the edge of the tank.

Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.

Remedy: Check the part program and shift the waterjet cut away from the edge of the tank.

700235 SAFE NOZZLE VIOLATION – ARBOR/NOZZLE DISABLED

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX574.3

Explanation: The PLC has detected that the key switch is set to disabled.
Cause: The enable/disable key switch is in the disabled state.
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Verify that PLC input I20.2 and input I20.6 are both on. Check that the contact blocks on the key switch are functioning properly.

700240 A AXIS BRAKE TEST ERROR 1 - INVALID SEQUENCE STEP

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX575.0

Explanation: The A axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that test the A axis brake encountered an error
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700241 A AXIS BRAKE TEST ERROR 2 - AXIS NOT STATIONARY

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX575.1

Explanation: The A axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that test the A axis brake encountered an error
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.

Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700242 A AXIS BRAKE TEST ERROR 3 - PULSE ENABLE MISSING

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX575.2

Explanation: The A axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that test the A axis brake encountered an error
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700243 A AXIS BRAKE TEST ERROR 4 - BRAKE TEST NOT SUCCESSFUL

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX575.3

Explanation: The A axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that test the A axis brake encountered an error
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700244 A AXIS BRAKE TEST ERROR 5 - TIME MONITORING ERROR

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX575.4

Explanation: The A axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that test the A axis brake encountered an error

Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700245 A AXIS BRAKE TEST ERROR 6 - RESET WHILE ACTIVE

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX575.5

Explanation: The A axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that test the A axis brake encountered an error
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700246 A AXIS BRAKE TEST ERROR 7 - INVALID ERROR NUMBER

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX575.6

Explanation: The A axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that test the A axis brake encountered an error
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700247 A AXIS BRAKE TEST ERROR 8 - TIME OUT ERROR

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX575.7

Explanation: The A axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that test the A axis brake encountered an error

Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700248 Z AXIS BRAKE TEST ERROR 1 - INVALID SEQUENCE STEP

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX576.0

Explanation: The Z axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that test the Z axis brake encountered an error
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700249 Z AXIS BRAKE TEST ERROR 2 - AXIS NOT STATIONARY

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX576.1

Explanation: The Z axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that test the Z axis brake encountered an error
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700250 Z AXIS BRAKE TEST ERROR 3 - PULSE ENABLE MISSING

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX576.2

Explanation: The Z axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that test the Z axis brake encountered an error
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700251 Z AXIS BRAKE TEST ERROR 4 - BRAKE TEST NOT SUCCESSFUL

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX576.3

Explanation: The Z axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that test the Z axis brake encountered an error
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700252 Z AXIS BRAKE TEST ERROR 5 - TIME MONITORING ERROR

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX576.4

Explanation: The Z axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that test the Z axis brake encountered an error
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700253 Z AXIS BRAKE TEST ERROR 6 - RESET WHILE ACTIVE

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX576.5

Explanation: The Z axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.

Cause: The function that test the Z axis brake encountered an error

Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.

Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700254 Z AXIS BRAKE TEST ERROR 7 - INVALID ERROR NUMBER

Control Package Version: 01.00.01

PLC Activation Address: DB2.DBX576.6

Explanation: The Z axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.

Cause: The function that test the Z axis brake encountered an error

Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.

Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700255 Z AXIS BRAKE TEST ERROR 8 - TIME OUT ERROR

Control Package Version: 01.00.01

PLC Activation Address: DB2.DBX576.7

Explanation: The Z axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.

Cause: The function that test the Z axis brake encountered an error

Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.

Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

OVERVIEW: 700332 ~ 700349

The “system on” alarms are messages meant to indicate the progress of the system on sequence. All the messages are self-clearing. If the system on sequence gets “hung up” on a particular message, one can find out at what point in the sequence the process has stopped.

700332 SYSTEM ON SEQUENCE STEP 10 – WAITING FOR SAFETY RELAY TO LOGICALLY ENERGIZE

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX582.0

Action: Clear any latched Park alarms.
Permissive: Wait until no latched alarms are active.

700333 SYSTEM ON SEQUENCE STEP 20 – RESETING AND WAITING FOR NC E-STOP TO CLEAR

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX582.1

Action: Trigger a global safety acknowledge.
Permissive: Wait until the PLC logical safety relay energizes.

700334 SYSTEM ON SEQUENCE STEP 30 – RESETING AND WAITING FOR ACTIVE ALARMS TO CLEAR

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX582.2

Action: If an NC Emergency Stop (DB10.DBX106.1) is active, trigger an NC Emergency Acknowledge (DB10.DBX56.2).
Permissive: Wait until the NC Emergency Stop (DB10.DBX106.1 is off) bit is not active.

700335 SYSTEM ON SEQUENCE STEP 40 – SENDING AN NC CHANNEL RESET SIGNAL

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX582.3

Action: Trigger an NC Channel Reset (DB21.DBX7.7).
Permissive: Wait for 0.250 second dwell.

700336 SYSTEM ON SEQUENCE STEP 50 – WAITING FOR NC CHANNEL RESET CONFIRMATION

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX582.4

Permissive: Wait until the NC Channel Reset bit comes on (DB21.DBX35.7).

700337 SYSTEM ON SEQUENCE STEP 100 – REQUEST AND WAIT FOR NC TO ASSUME JOG MODE

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX582.5

Action: Request the NC go to JOG mode (DB11.DBX0.2).
Permissive: Wait until the NC is in JOG mode (DB11.DBX6.2 is on).

700338 SYSTEM ON SEQUENCE STEP 110 – REQUEST AND WAIT FOR NC TO ASSUME REF MODE

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX582.6

Action: Request the NC go to REF mode (DB11.DBX1.2).
Permissive: Wait until the NC is in REF mode (DB11.DBX7.2 is on).

700339 SYSTEM ON SEQUENCE STEP 150 - PERFORMING A SAFETY BRAKE TEST ON A AXIS

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX582.7

Action: The A axis brake requires testing every 24 hours or whenever the power is cycled.
Permissive: Wait for function to be completed.

700340 SYSTEM ON SEQUENCE STEP 200 – PERFORMING A SAFETY TEST STOP ON X AXIS

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX583.0

Action: If X axis requires a test stop (DB31.DBX166.5 is on), start a test stop via DB31.DBX140.0.

Permissive: Wait until the test stop completes (if triggered, DB31.DBX140.0 is off) and the test stop is not required (DB31.DBX166.4 is off).

700341 SYSTEM ON SEQUENCE STEP 210 – PERFORMING A SAFETY TEST STOP ON Y AXIS

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX583.1

Action: If Y axis requires a test stop (DB32.DBX166.5 is on), start a test stop via DB32.DBX140.0.
Permissive: Wait until the test stop completes (if triggered, DB32.DBX140.0 is off) and the test stop is not required (DB32.DBX166.4 is off).

700342 SYSTEM ON SEQUENCE STEP 220 – PERFORMING A SAFETY TEST STOP ON Z AXIS

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX583.2

Action: If Z axis requires a test stop (DB33.DBX166.5 is on), start a test stop via DB33.DBX140.0.
Permissive: Wait until the test stop completes (if triggered, DB33.DBX140.0 is off) and the test stop is not required (DB33.DBX166.4 is off).

700343 SYSTEM ON SEQUENCE STEP 230 – PERFORMING A SAFETY TEST STOP ON A AXIS

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX583.3

Action: If A axis requires a test stop (DB34.DBX166.5 is on), start a test stop via DB34.DBX140.0.
Permissive: Wait until the test stop completes (if triggered, DB34.DBX140.0 is off) and the test stop is not required (DB34.DBX166.4 is off).

700344 SYSTEM ON SEQUENCE STEP 240 – PERFORMING A SAFETY TEST STOP ON C AXIS

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX583.4

Action: If the C axis requires a test stop (DB35.DBX166.5 is on), start a test stop via DB35.DBX140.0.
Permissive: Wait until the test stop completes (if triggered, DB35.DBX140.0 is off) and the test stop is not required (DB35.DBX166.4 is off).

700345 SYSTEM ON SEQUENCE STEP 250 – PERFORMING A SAFETY TEST STOP ON AXIS 1

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX583.5

Action: If axis 1 (column) axis requires a test stop (DB36.DBX166.5 is on), start a test stop via DB36.DBX140.0.
Permissive: Wait until the test stop completes (if triggered, DB36.DBX140.0 is off) and the test stop is not required (DB36.DBX166.4 is off).

700346 SYSTEM ON SEQUENCE STEP 300 – PERFORMING A FINAL RESET

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX583.6

Action: Trigger an NC Emergency Acknowledge (DB10.DBX56.2).
Trigger an NC Mode Group Reset (DB11.DBX0.7).
If a safety Internal Event bit is active on any axis, trigger an Internal Event Ack for that axis.
Permissive: Wait for 0.400 second dwell.

700347 SYSTEM ON SEQUENCE STEP 310 – WAITING FOR NCK READY SIGNAL

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX583.7

Action: Wait for NCK CPU ready for operation (DB10 DBX104.7 to be on).

700348 SYSTEM ON SEQUENCE STEP 320 – WAITING FOR NC READY SIGNAL

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX584.0

Action: Wait for NC CPU ready for operation (DB10 DBX108.7 to be on).

700349 SYSTEM ON SEQUENCE STEP 330 – WAITING FOR CHANNEL READY FOR OPERATION SIGNAL

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX584.1

Action: Wait for CHANNEL ready for operation (DB21 DBX36.5 to be on).

700350 SYSTEM ON SEQUENCE STEP 900 – WAITING FOR SYSTEM ON SIGNAL TO CONFIRM

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX584.2

Action: Wait for PLC logic to latch the system on circuit. Once confirmed, the system on sequence is complete and reset to step 0.

700351 SYSTEM ON SEQUENCE STEP 160 - PERFORMING A SAFETY BRAKE TEST ON Z AXIS

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX584.3

Action: The Z axis brake requires testing every 24 hours or whenever the power is cycled.
Permissive: Wait for function to be completed.

OVERVIEW: 700356 ~ 700358

These “system on” alarms indicate why a system on sequence was NOT started.

700356 ATTENTION - SYSTEM ON CYCLE NOT INITIATED – ENABLE SPINDLE (KEY SWITCH)

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX585.0

Explanation: The attempt to turn the system on has been blocked.
Cause: The spindle disable/enable switch is in the “disable” position. To facilitate a test-stop (a function of the system on sequence), the spindle must be enabled.
Remedy: Set spindle disable/enable switch to the “enable” position.

700357 ATTENTION - SYSTEM ON CYCLE NOT INITIATED – PROGRAMMING RUNNING

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX585.1

Explanation: The attempt to turn the system on has been blocked.

Cause: The NC is currently running a program. To facilitate a test-stop (a function of the system on sequence), the NC must not be running a program.

Remedy: Stop all running NC programs.

700358 ATTENTION - SYSTEM ON CYCLE NOT INITIATED – NCK NOT READY

Control Package Version: 01.00.01

PLC Activation Address: DB2.DBX585.2

Explanation: The attempt to turn the system on has been blocked.

Cause: The NCK CPU is not ready for operation. Refer to DB10 DBX104.7 (NC-CPU ready).

Remedy: Cycle power to the machine, allow adequate time for the NCK CPU to register itself cyclically with the PLC and exchange sign-of-life signals.

OVERVIEW: 700432 ~ 700537

These “jet pump” alarms and information indicate feedback from the waterjet pump. Please refer to the waterjet pump manual for more information.

700432 JET PUMP ALARM - MAIN MOTOR SOFT START FAULT

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX590.0

Explanation: The primary motor did not start.
Cause:
- The motor is not cooling sufficiently.
- The motor is being started too frequently.
- The motor bearing is too hot.
- A fuse in the electrical enclosure has blown.
- The soft starter sensed a fault.
- The thermal overload relay has tripped.

Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700433 JET PUMP ALARM - MAIN MOTOR NOT RUNNING

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX590.1

Cause: The pump controller did not receive the signal from the starter when the pump was turned on.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700434 JET PUMP ALARM - LOW INLET WATER PRESSURE

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX590.2

Cause:
- The supply water is lower than 40 psi (2.8 bar).
- Pressure is lost because of a leak.
- The supply water is off.

Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700435 JET PUMP ALARM - INTENSIFIER OVERSTROKE RIGHT

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX590.3

Explanation: An overstroke fault occurs when the hydraulic piston travels faster than the pump can sustain.
Cause: The poppet (high pressure or low pressure) is stuck or is leaking.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700436 JET PUMP ALARM - INTENSIFIER OVERSTROKE LEFT

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX590.4

Explanation: An overstroke fault occurs when the hydraulic piston travels faster than the pump can sustain.
Cause: The poppet (high pressure or low pressure) is stuck or is leaking.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700437 JET PUMP ALARM - HYDRAULIC FLUID > 65C (149F)

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX590.5

Explanation: The hydraulic fluid temperature is higher than 65°C (149°F).
Cause: The system is not cooling sufficiently.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700438 JET PUMP ALARM - HYDRAULIC FLUID LEVEL IS LOW

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX590.6

Explanation: The float switch in the hydraulic fluid tank monitors the fluid level.
Cause: A hydraulic fitting or a hydraulic hose is leaking.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700439 JET PUMP ALARM - BOOST PUMP CONTACTOR ERROR

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX590.7

Cause: The boost motor did not start because the thermal overload relay is tripped.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700440 JET PUMP ALARM - BATTERY ERROR

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX591.0

Cause: The pump controller battery is not operating correctly.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700441 JET PUMP ALARM - START PROCEDURE HYDRAULIC PRESSURE TOO LOW

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX591.1

Cause: An error occurred during stage 3 of the start sequence.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.

Remedy: Refer to the jet pump manual.

700442 JET PUMP ALARM - PRESSURE TOO LOW (RAMP TO PIERCE)

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX591.2

Cause: An error occurred during stage 4 of the start sequence.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700443 JET PUMP ALARM - PRESSURE TOO LOW (RAMP TO CUT)

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX591.3

Cause: An error occurred during stage 5 of the start sequence.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700444 JET PUMP ALARM - WATER PRESSURE CONTROL ERROR

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX591.4

Explanation: The pump did not get to the target water pressure within the expected time.
Cause:
- The orifice has failed.
- A component inside the hydraulic center has failed.
- The hydraulic pressure transducer on the pump manifold has failed.
- The pressure control valve on the pump manifold has failed.
- The relief valve on the pump manifold has failed.
- The hydraulic compensator on the pump has failed.

Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700445 JET PUMP ALARM - NO COMMUNICATION WITH JET PUMP

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX591.5

Explanation: The PLC is not communicating with the jet pump controller.
Cause:
- The jet pump is not powered on.
- The communication cable has been damaged.
- The Local/Remote key switch on pump is not switched to Remote.
- The Controls On lighted pushbutton is not on.
- The relief valve on the pump manifold has failed.
- The hydraulic compensator on the pump has failed.

Reaction: The alarm is latched until cleared.
Remedy: Refer to the jet pump manual on operating the pump remotely.

700446 JET PUMP INFO - CUT PRESSURE SET TO LIMIT (INVALID INPUT)

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX591.6

Cause: The entered cut pressure target was outside the valid limits.
Reaction: The alarm is latched until a valid cut pressure target is entered.
Remedy: Enter a valid cut pressure target (5000 – 60000 psi).

700447 JET PUMP INFO - PIERCE PRESSURE SET TO LIMIT (INVALID INPUT)

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX591.7

Cause: The entered pierce pressure target was outside the valid limits.
Reaction: The alarm is latched until a valid pierce pressure target is entered.
Remedy: Enter a valid pierce pressure target (5000 – 60000 psi).

700448 JET PUMP INFO - EMPTY THE DIRTY WATER CONTAINER

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX592.0

Cause: The dirty water container is full.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Empty the container. Refer to the jet pump manual.

700449 JET PUMP INFO - FLUID MONITORING IS DISCONNECTED

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX592.1

Cause: The SMI (Seal Maintenance Indicator) is not plugged in or is damaged.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Make sure that the SMI cable harness is not damaged and that the connections are not loose. Refer to the jet pump manual.

700450 JET PUMP INFO - FLUID MONITORING SENSOR ERROR

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX592.2

Cause:
- A tube is dirty.
- An object is blocking the optical sensor.
- An optical sensor is damaged.
- An optical sensor is dirty.

Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700451 JET PUMP INFO - LEFT DYNAMIC SEAL WARNING

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX592.3

Cause: The SMI (Seal Maintenance Indicator) senses that the high-pressure seal life remaining is between 8 hours and 50 hours.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.

Remedy: Replace the seal. Refer to the jet pump manual.

700452 JET PUMP INFO - RIGHT DYNAMIC SEAL WARNING

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX592.4

Cause: The SMI (Seal Maintenance Indicator) senses that the high-pressure seal life remaining is between 8 hours and 50 hours.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Replace the seal. Refer to the jet pump manual.

700453 JET PUMP INFO - LEFT STATIC SEAL WARNING

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX592.5

Cause: The SMI (Seal Maintenance Indicator) senses that the high-pressure seal life remaining is between 8 hours and 50 hours.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Replace the seal. Refer to the jet pump manual.

700454 JET PUMP INFO - RIGHT STATIC SEAL WARNING

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX592.6

Cause: The SMI (Seal Maintenance Indicator) senses that the high-pressure seal life remaining is between 8 hours and 50 hours.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Replace the seal. Refer to the jet pump manual.

700455 JET PUMP INFO - CONTROLS NOT ON (PRESS SYSTEM ON PUSHBUTTON)

Control Package Version: 01.00.01

PLC Activation Address: DB2.DBX592.7

Cause: The PLC is not receiving the signal indicating that the jet pump controller is on.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Make sure that the Local/Remote key switch is set to Remote. Press the Cycle Start button to turn the jet pump controller on. Refer to the jet pump manual.

700456 JET PUMP INFO - HYDRAULIC FLUID > 55C (131F)

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX593.0

Cause: The hydraulic fluid is too hot, but the system will continue running.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700457 JET PUMP INFO - LEFT DYNAMIC SEAL FAULT 2

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX593.1

Cause: The SMI (Seal Maintenance Indicator) senses an imminent high-pressure seal failure.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Replace the seal. Refer to the jet pump manual.

700458 JET PUMP INFO - RIGHT DYNAMIC SEAL FAULT 2

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX593.2

Cause: The SMI (Seal Maintenance Indicator) senses an imminent high-pressure seal failure.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Replace the seal. Refer to the jet pump manual.

700459 JET PUMP INFO - LEFT STATIC SEAL FAULT 2

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX593.3

Cause: The SMI (Seal Maintenance Indicator) senses an imminent high-pressure seal failure.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Replace the seal. Refer to the jet pump manual.

700460 JET PUMP INFO - RIGHT STATIC SEAL FAULT 2

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX593.4

Cause: The SMI (Seal Maintenance Indicator) senses an imminent high-pressure seal failure.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Replace the seal. Refer to the jet pump manual.

700461 JET PUMP INFO - LEFT DYNAMIC SEAL FAULT 3

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX593.5

Cause: The SMI (Seal Maintenance Indicator) senses an imminent high-pressure seal failure.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Replace the seal. Refer to the jet pump manual.

700462 JET PUMP INFO - RIGHT DYNAMIC SEAL FAULT 3

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX593.6

Cause: The SMI (Seal Maintenance Indicator) senses an imminent high-pressure seal failure.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.

Remedy: Replace the seal. Refer to the jet pump manual.

700463 JET PUMP INFO - LEFT STATIC SEAL FAULT 3

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX593.7

Cause: The SMI (Seal Maintenance Indicator) senses an imminent high-pressure seal failure.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Replace the seal. Refer to the jet pump manual.

700532 JET PUMP INFO - RIGHT STATIC SEAL FAULT 3

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX598.0

Cause: The SMI (Seal Maintenance Indicator) senses an imminent high-pressure seal failure.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Replace the seal. Refer to the jet pump manual.

700533 JET PUMP INFO - E-STOP PUSHBUTTON PRESSED

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX598.1

Explanation: Displays the status of the E-stop device.
Cause: This alarm is raised when the PLC logical input (I30.1) of the jet pump E-Stop indicates the device is in the E-stopped condition.
Reaction: This alarm is self-clearing.
The alarm is for displaying the status of the E-stop device only.
Remedy: Reset the E-stop device. Check the pair of PLC inputs (I30.1 and I30.5) against the schematic for proper 2-channel signaling (both channels should be electrically equivalent).

700534 JET PUMP INFO - COMMUNICATION ALARMS BYPASSED!!!

Control Package Version: 01.00.01

PLC Activation Address: DB2.DBX598.2

Explanation: Communication alarms have been bypassed from the HMI
Reaction: The alarm is latched until cleared.
Remedy: Make sure the jet pump is powered up and setup for remote control. Disable the alarm bypass on the HMI.

700535 JET PUMP INFO - INTENSIFIER IS DISABLED

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX598.3

Explanation: The jet pump has notified the PLC that the intensifier is disabled.
Reaction: The alarm is latched until cleared.
Remedy: Refer to the jet pump manual.

700536 JET PUMP ALARM – INTENSIFIER 2 OVERSTROKE RIGHT

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX598.4

Explanation: An overstroke fault occurs when the hydraulic piston travels faster than the pump can sustain.
Cause: The poppet (high pressure or low pressure) is stuck or is leaking.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700537 JET PUMP ALARM – INTENSIFIER 2 OVERSTROKE LEFT

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX598.5

Explanation: An overstroke fault occurs when the hydraulic piston travels faster than the pump can sustain.
Cause: The poppet (high pressure or low pressure) is stuck or is leaking.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700538 JET PUMP INFO - TOO MANY MOTOR STARTS IN 15 MINUTES

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX598.6

Explanation: Starting and stopping the motor rapidly can cause damage to the motor.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Refer to the jet pump manual.

700539 JET PUMP INFO - FAN MOTOR WARNING

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX598.7

Explanation: The fan motor did not start because the thermal overload relay tripped.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Reset the relay. Refer to the jet pump manual.

700540 JET PUMP ALARM - HYDRAULIC FLUID 45C SENSOR FAULT

Control Package Version: 01.00.01
PLC Activation Address: DB2.DBX599.0

Explanation: The temperature sensor in the hydraulic fluid tank has failed.
Reaction: The alarm is latched until cleared.
Alarm must be reset on pump panel.
Remedy: Replace the sensor. Refer to the jet pump manual.

End of document.